

# Notice of Allowability

Application No.

10/672,242

Examiner

John Kim

Applicant(s)

WEIGEL ET AL.

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1723

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the response filed 3/10/06.
2. ☒ The allowed claim(s) is/are 1-12.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 3/13/06
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

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1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Mark Catan on 5/17/06.

The application has been amended as follows:

-Paragraph [0009], line 7: After "2/25/00," --U.S. Patent No. 6,638,478,-- has been added.

-Claim 1, line 3: "that receives" has been changed to --having inlets and outlets for--.

line 4: "controls" and "to maintain a correct" have been deleted.

line 5: "fluid balance of the patient" has been deleted.

-Claim 1, before line 6, the following has been inserted:

--at least one pressure sensor configured to measure a pressure difference between at least one of said inlets relative to a respective outlet;--.

-Claim 1, line 9: "receiving" has been changed to --configured to receive--.

-Claim 1, line 9: "adjusting" has been changed to --adjust--.

-Claim 1, line 10: After "signal", --to maintain a correct fluid balance of the patient-- has been added.

-Claim 1, line 12: After first occurrence of "measurement", -- by said at least one pressure sensor-- has been added.

-Claim 2, line 1: "stores" has been changed to --configured to store--.

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- Claim 2, line 3: "aid" has been changed to --said--.
- Claim 3, line 6: A second occurrence of "at least one of said" has been deleted.
- Claim 3, line 7: After "outputs", -- for measuring venous pressure -- has been added.
- Claim 3, line 9: After "sensor", the following has been added:  
-- and further to generate a fluid compensation signal responsive to said error rate--.
- Claim 3, lines 10-11 have been deleted.
- Claim 7, line 4: Between "fluid" and "consumed", -- flow -- has been inserted.
- Claim 7, line 5: "first" has been changed to --second--.
- Claim 7, line 6: Between "fluid" and "generated", -- flow -- has been inserted.
- Claim 7, line 10: After "sensor", the following has been added:  
-- and further to generate a fluid compensation signal responsive to said error rate--.
- Claim 7, lines 11-13 have been deleted.

2. The following is an examiner's statement of reasons for allowance: US Patent No. 6,638,478 (Treu et al) is considered the closest prior art to claimed inventions. Treu et al teach a device for balancing the flow of fluids in a blood treatment system comprising a balancing mechanism having inlets and outlets and a machine (16) sensing waste fluid pressure and adjusting waste fluid pressure by controlling waste fluid removal rate through the fluid balancing compartments (i.e. through control of the waste and replacement pump (152) (see figure 11; col. 23, lines 28-38). However, Treu et al does neither teach nor suggest the device of claim 1 comprising at least one pressure sensor configured to measure a pressure difference between at least one of the inlets relative to a respective outlet, the balancing mechanism configured to receive a compensation signal and adjust a balance between a ratio of the first flow to the second

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flow responsively to the compensation signal and a controller configured to generate the compensation signal responsively to at least one pressure measurement by the at least one pressure sensor, the at least one pressure measurement including at least one of the differences between respective inlet and outlet pressures of the first and second flows and the device of claim 3 comprising at least one pressure sensor in at least one of the venous line and the outputs for measuring venous pressure, a controller configured to calculate an error rate in a net fluid transfer rate as a function of a signal from a pressure sensor and further generate a fluid compensation signal responsive to the error rate and the volumetric balancing mechanism configured to receive the fluid compensation signal and adjust a relative rate of the first and second fluid flows responsively thereto and the device of claim 7 comprising at least one pressure sensor configured to measure a pressure difference between at least one of the inputs relative to a respective output, a controller configured to calculate an error rate in a net fluid transfer rate as a function of a signal from a pressure sensor and further generate a fluid compensation signal responsive to the error rate and the volumetric balancing mechanism configured to receive the fluid compensation signal and adjust a relative rate of the first and second fluid flows responsively thereto. Claim 2 depends on the allowable claim 1. Claims 4-6 depend on the allowable claim 3. Claims 8-12 depend on the allowable claim 7.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Replacement drawings filed on 3/10/06 are acceptable.

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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Kim whose telephone number is 571-272-1142. The examiner can normally be reached on Monday-Friday 7 a.m. - 3:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Kim can be reached on 571-272-1142. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**John Kim**  
**Primary Examiner**  
**Art Unit 1723**

JK  
May 17, 2006